

Serial No.: 09/834,093
Attorney Docket No.: 10006533-1

REMARKS

The above-identified Office Action dated September 24, 2003 contained a final rejection of claims 1-20. Claims 1, 11 and 14 have been amended, **not** in response to the rejections based on the cited references, but in an effort to **clarify the invention**. Therefore, the Applicants submit that a new search will **not** be required by the Examiner. As such, the foregoing amendments to the claims and the remarks below are intended to place the case in condition for allowance, or alternately in better form for consideration on appeal under 37 CFR 1.116. Therefore, it is respectfully requested that the amendments to claims 1 and 18 be entered despite the finality of the present rejection.

Record is made of a telephonic interview between Applicants' attorney Edmond A. DeFrank and Examiner J. Huffman on November 18, 2003. The Office Action of September 24, 2003, the cited references and the pending claims were discussed. A proposed amendment modifying claims 1, 11 and 14 was discussed during the interview. Although no agreement was reached, the above amendments to the claims reflect the discussion between the Examiner and the Applicants' attorney.

The Office Action rejected claims 1-9 and 14-20 under 35 U.S.C. § 103(a) as being unpatentable over Ishinaga et al. (U.S. Patent No. 5,175,565) in view of Kawanabe et al. (U.S. Patent No. 6,219,153) and Winzer et al. (U.S. Patent No. 5,629,578).

The Applicants respectfully traverse this rejection based on the amendments to the claims and the arguments below.

Specifically, claims 1 and 14 recite in part "...a controller that uses the sensed temperatures to control temperature variations of the die sectors...to be within a predefined range from a starting point of an initial print swath to an end point of the initial print swath and successive print swaths of pigmented ink by constantly sensing the temperatures during the print swaths..." and "...all of the die sectors are kept at an optimal temperature, including die sectors that are inactive during the initial and successive print swaths."

Although the Examiner argued on pages 7-8 of Paper No. 16 that Ishinaga et al. "...control the temperature of the entire substrate to maintain temperature uniformity, and do such during printing, regardless of which nozzles are firing at a given time...", the Applicant respectfully submits that this is different than the Applicant's claimed invention.

In particular, the Applicant's claimed invention includes controlling "...temperature variations of the die sectors...from a starting point of an initial print swath to an end point of the initial print swath and successive print swaths...by constantly sensing the temperatures during the print swaths..." and "...all of the die sectors are kept at an optimal temperature, including die sectors that are inactive during the initial and successive print swaths."

In contrast, the cited references, **in combination**, do not teach, suggest or disclose all of the Applicant's features. Namely, Ishinaga et al. merely disclose a "...substrate for liquid ejection, comprising: a built-in energy generating element for generating thermal energy...and a built-in temperature detecting element for detecting a temperature of said substrate." Next, Kawanabe et al. simply disclose "...a system that chooses between a pigmented ink or a dye ink based on input data" while Winzer et al. merely disclose a "...composite acoustic transducer array."

Specifically, Ishinaga et al. disclose that "...heat generation by the temperature keeping heater (H1, H2) provided adjacent to the opposite ends of the substrate are independently controlled..." As such, Ishinaga et al. controls temperatures at the ends of the substrate, unlike the Applicant's invention which controls temperatures "...from a starting point of an initial print swath to an end point of the initial print swath and successive print swaths...by constantly sensing the temperatures during the print swaths..." Thus, "...all of the die sectors are kept at an optimal temperature, including die sectors that are inactive during the initial and successive print swaths." Therefore, since Ishinaga et al., Kawanabe et al. and Winzer et al. in **combination** are **missing** at least one element of claims 1 and 14, the Applicant submits that the rejection should be withdrawn.

The Office Action rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Ishinaga et al. in view of Kawanabe et al. and Winzer and further in view of Kato et al. Further, the Office Action rejected claims 11-13 under 35 U.S.C. § 103(a) as being unpatentable over Ishinaga et al. in view of Kawanabe et al. and Barteck (U.S. (Patent No. 4,403,229).

Claim 11 recites in part "...controlling temperature variations of the die sectors of the printhead to be within a predefined range from a starting point of an initial print swath

to an end point of the initial print swath and successive print swaths of pigmented ink by constantly sensing the temperatures during the print swaths...and...wherein all of the die sectors are kept at an optimal temperature, including die sectors that are inactive during the initial and successive print swaths."

As argued above, the combination of Ishinaga et al. with the above argued references do **not** disclose all of the Applicant's claimed features. In addition, the additional references used to support the rejections of claims 10 and 11-13 add nothing to the cited combination that would render the Applicant's claimed invention obvious.

For instance, Kawanabe et al., Winzer et al. and Kato et al., in combination with Ishinaga et al. or each taken alone, do **not** teach, suggest or disclose the Applicants' claimed "...controlling temperature variations of the die sectors...to be within a predefined range from a starting point of an initial print swath to an end point of the initial print swath and successive print swaths...by constantly sensing the temperatures during the print swaths...and...wherein all of the die sectors are kept at an optimal temperature, including die sectors that are inactive during the initial and successive print swaths."

Therefore, a prima facie case of obviousness **cannot** be established because the combination of cited references is missing a limitation of the claimed invention, and thus, the rejections must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital (MPEP 2143.01).

With regard to the rejection of the dependent claims, because they depend from the above-argued respective independent claims, and they contain additional limitations that are patentably distinguishable over the cited references, these claims are also considered to be patentable (MPEP § 2143.03).

As the foregoing amendments to the specification do not raise new issues, it is the Applicants position that they are entitled to have the changes entered to place this case in condition for allowance, or alternately, in better condition for consideration on appeal under 37 CFR 1.116. It is, therefore, respectfully requested that the changes to the claims be entered despite the finality of the present rejection.

Thus, it is respectfully requested that claims 1-20 be allowed based on the amendments and arguments. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of claims 1-20 and to pass this application to issue.

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Additionally, in an effort to further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (818) 885-1575 if the Examiner has any questions or concerns. Please note that all correspondence should continue to be directed to:

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Respectfully submitted,
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